

ARG44239 anti-EHMT2 / G9A antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes EHMT2
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	EHMT2 / G9A
Species	Human
Immunogen	Recombinant protein of Human EHMT2 / G9A
Conjugation	Un-conjugated
Alternate Names	H3-K9-HMTase 3; GAT8; KMT1C; G9A; Euchromatic histone-lysine N-methyltransferase 2; Histone H3-K9 methyltransferase 3; Protein G9a; NG36; Lysine N-methyltransferase 1C; C6orf30; HLA-B-associated transcript 8; EC 2.1.1.43; Histone-lysine N-methyltransferase EHMT2; EC 2.1.1.-; BAT8

Application Instructions

Application table	Application	Dilution
	FACS	1-3 µg/1x10 ⁶ cells
	ICC/IF	5 µg/ml
	IHC-P	2-5 µg/ml
	WB	0.25-0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

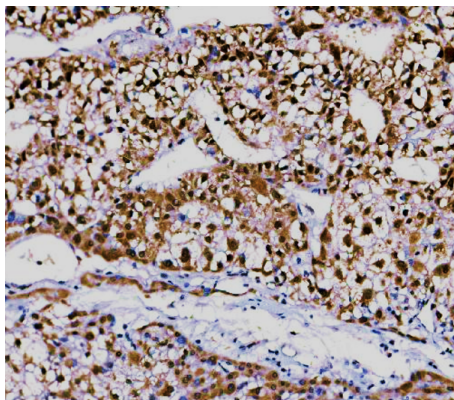
before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

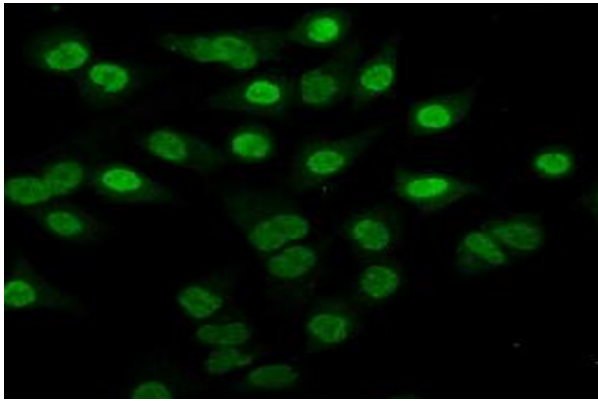
Gene Symbol	EHMT2
Gene Full Name	euchromatic histone-lysine N-methyltransferase 2
Background	This gene is located in a gene cluster within the human major histocompatibility complex class III region on chromosome 6. This gene was thought to be two different genes, NG36 and G9a, adjacent to each other but recent publications show that there is only a single gene at this locus. The encoded protein is a histone methyltransferase, which may be involved in repression of transcription. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]
Function	Histone methyltransferase that specifically mono- and dimethylates 'Lys-9' of histone H3 (H3K9me1 and H3K9me2, respectively) in euchromatin. H3K9me represents a specific tag for epigenetic transcriptional repression by recruiting HP1 proteins to methylated histones. Also mediates monomethylation of 'Lys-56' of histone H3 (H3K56me1) in G1 phase, leading to promote interaction between histone H3 and PCNA and regulating DNA replication. Also weakly methylates 'Lys-27' of histone H3 (H3K27me). Also required for DNA methylation, the histone methyltransferase activity is not required for DNA methylation, suggesting that these 2 activities function independently. Probably targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. May also methylate histone H1. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Also methylates CDYL, WIZ, ACIN1, DNMT1, HDAC1, ERCC6, KLF12 and itself. [UniProt]
Calculated Mw	132 kDa
PTM	Methylated at Lys-185; automethylated.
Cellular Localization	Nucleus. Chromosome. Note=Associates with euchromatic regions. Does not associate with heterochromatin

Images



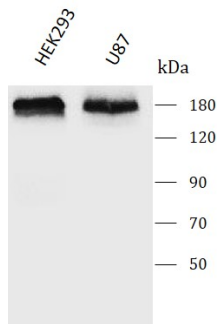
ARG44239 anti-EHMT2 / G9A antibody IHC-P image

Immunohistochemistry: Human liver cancer stained with ARG44239 anti-EHMT2 / G9A antibody at 2 µg/mL dilution.



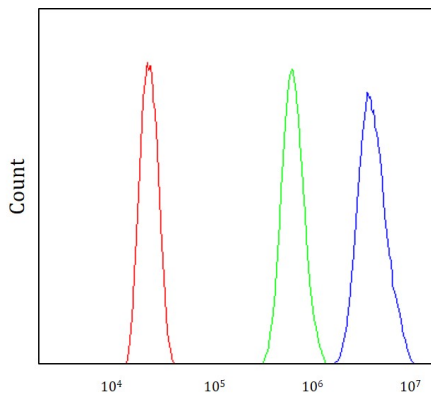
ARG44239 anti-EHMT2 / G9A antibody ICC/IF image

Immunofluorescence: A549 stained with ARG44239 anti-EHMT2 / G9A antibody at 5 $\mu\text{g}/\text{mL}$ dilution.



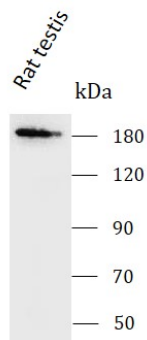
ARG44239 anti-EHMT2 / G9A antibody WB image

Western blot: HEK293 and U87 stained with ARG44239 anti-EHMT2 / G9A antibody at 0.5 $\mu\text{g}/\text{mL}$ dilution.



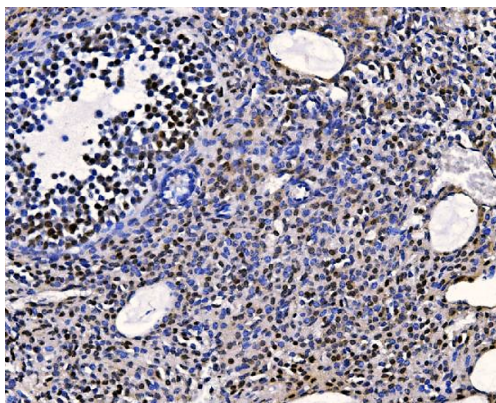
ARG44239 anti-EHMT2 / G9A antibody FACS image

Flow Cytometry: HL-60 stained with ARG44239 anti-EHMT2 / G9A antibody at 1 $\mu\text{g}/1 \times 10^6$ cells dilution.



ARG44239 anti-EHMT2 / G9A antibody WB image

Western blot: Rat testis stained with ARG44239 anti-EHMT2 / G9A antibody at 0.5 $\mu\text{g}/\text{mL}$ dilution.



ARG44239 anti-EHMT2 / G9A antibody IHC-P image

Immunohistochemistry: Mouse ovary stained with ARG44239 anti-EHMT2 / G9A antibody at 2 µg/mL dilution.